

## **REMARKS**

The prosecution of this application by the patent office has been very distressing.

There have been 4 actions by the Examiner who has constantly been switching his position by first introducing references, then withdrawing them and introducing new references all of which were available to him before the first action. During the entire prosecution there have been essentially no changes in the claims with the claimed invention remaining basically the same.

This is a response to yet another action without a final action that is predicated on an erroneous interpretation and application of the principal reference (Hesley et al.) that was not even presented by the Examiner until the third action, and the second most important reference (Casebolt, et al.) presented during the fourth action. (It should be noted that the Examiner made the second action final which he withdrew when it was pointed out that it was done in error since he had withdrawn the reference that was the primary basis for rejection and relied on a new reference against a majority of the claims that had not been changed.)

Since all claims have been rejected as being obvious under 35 U.S.C. §103(a), we believe that a discussion as to what is or is not, in our view, obvious is in order.

The Examiner's main objection to Applicant's claims lies completely in the realm of alleged obviousness, since no reference was found that in and by itself anticipates applicant's claims.

Obviousness implies that it would have been easy to a person skilled in the art to combine certain teachings to come up with the solution under discussion. As stated in

previous responses, we respectfully submit that obviousness cannot be used in this case, due to the large amount of different elements that have to be combined and the large distance in content and intent between the elements and references.

For a person skilled in the art to come up with Applicant's solution, he would need to do the following:

1. Recognize that RSI (Repetitive Strain Injury) is NOT only caused by excessive and repetitive clicking and moving the mouse, but also by having the hand in a static, cramped motionless position for a long period of time. We submit that this in itself is not considered obvious in the scientific (ergonomic) community. When referring to RSI, *in all cases referenced by the Examiner*, it is clear that only the amount of work done with the mouse (volume of clicks etc.), and thus the traditional perception of the cause of RSI was known to and thought to be of relevance by Hesley.
2. Recognize that supporting the hand or placing it in another position on the mouse, changing the shape of the mouse or otherwise, is not sufficient to counteract the negative effects of holding a mouse.
3. Recognize that in regular mouse use there are many periods of time the mouse is held without using it.
4. Realize and scientifically test that it is possible to successfully remove (part of) these inactive (redundant) time periods, without impeding productivity and normal workflow.
5. Come up with a way to train users to remove the hand so that it becomes automatic and does not disturb or annoy the user.
6. Come up with a system that will be accepted by the user for normal everyday use.
7. Set up a system that can detect presence of the hand (limb), then monitors not ACTIVITY, but on the contrary the periods of INACTIVITY, and provides a non-disturbing, effective and efficient signal to the user to interrupt the static tension, provide beneficial breaks in muscle tension and reduce overall time the mouse is held, without reducing productivity.

From the sheer number and array of different elements that have to be combined to come up with a system as described by Applicant, it is respectfully submitted that Applicant's invention is far from "obvious."

If we may add an analogy of our own:

If a group of experts is presented with a box of parts, without knowledge of that the parts are aimed to do when assembled, it will be unlikely and at least difficult for these experts to come up with the intended solution. Now, if we do not supply the same parts in a box, but we ask the experts to look for them among a great number of other, non-relevant parts, still without knowing why, it would be virtually impossible, and certainly not obvious, for them to come up with the intended solution.

While the Examiner's rejections of the claims will be covered in particular detail hereinafter, we will first address the erroneous reading and interpretation of the Hesley and Casebolt patents which are the foundation upon which the Examiner has built his case.

To understand the situation the Examiner's attention is initially directed to his "Response to Argument" found beginning on page 6 of the Official Action.

Specifically, the Examiner states that "Applicant argues: a) Prior art fails to teach 'creating a warning signal to the user after too much user activity' " and refers to Page 8, Page 1 of Applicant's amendment filed April 5, 2007 (I assume the Examiner is referring to paragraph 1).

The Examiner is clearly mistaken as will be seen from reading the referred to paragraph as set forth below.

"As to the rejection of Claim 27, it was acknowledged that Hesley teaches a system detecting the presence of a hand. However in this patent we cannot find

reference to a system that generates an alarm signal if no user activity is detected. What the Examiner refers to is a system that creates a warning signal to the user after too much activity (Hesley), or in the case of Lignoul, a trigger to enter in screen saver mode. Thus the combination of Hesley and Lignoul does not anticipate this claim."

The clear interpretation of the Hesley portion in question emphasizes that it is user activity that is being measured and the Examiner's gratuitous statement in Section 17 of the Official Action "(including whether the user was using or not using the apparatus)" finds no support. The relevant quote of the cited Hesley section (col. 6 line 64-67) is as follows.

"The pressure timing circuit measures an amount of time a user maintains pressure on the ergonomic hand support section and generates a time-out signal when the amount of time exceeds a predefined time." (Emphasis supplied).

The Examiner's reference to Lignoul in Section 17 is not understood.

It is important to note that nowhere in Hesley is there any mention of static muscle tension, cramped motionless position or anything else that might suggest that Hesley is aware of the fact that this static muscle tension is a significant cause of computer related health problems.

While the Examiner is aware of Hesley's shortcomings, the utilization of Casebolt is not understood. Casebolt does not make up the deficiencies noted with respect to Hesley.

Examiner is "relying on Casebolt only for his teachings of a well-known state machine having a state wherein user's hand is present in the mouse yet the mouse has

not been moved for a predetermined time.” How this teaching can transform Hesley’s teaching into anticipating applicant’s invention defies logic. As stated by the Examiner, Casebolt is a power management system and to conclude that “it would have been obvious to combine the teachings of Hesley with that of Casebolt because the system is configured to be used in environments outside of simply power management system” is an incredulous extension of the obviousness doctrine. To give any credibility to Casebolt it would have to teach the sensing and timing pressure position of a hand inactive and on the signal input device over a predetermined period of time and then warning the user to remove his hand WHICH IT CLEARLY DOES NOT.

One being aware of the Hesley and Casebolt teaching would not believe that it was obvious to combine them in the manner indicated. Actually, if one believes they can be combined, such a combination would still not anticipate applicant’s invention.

The Examiner recognizes that Hesley does not disclose a system including a timing means for measuring the time a limb is disposed adjacent a signal input device and means coupling the input signal to the timing means such that the timing means is only started when no input signal is being generated and means for generating an alarm signal to the user when said length of time exceeds a certain value. Succinctly stated, Hesley does not provide for the stress relief of the user’s hand after a predetermined time in an inactive position.

What is confounding applicant is his position that Hesley’s system already teaches all the limitations of the claimed invention of warning the user of possibly

developing RSI after a length of time no input signal is being generated when the length of time exceeds a threshold value.

The Examiner is correct in his statement that Hesley warns the user of possibly developing RSI due to prolonged use of the mouse which is not applicant's invention.

The Examiner, recognizing this deficiency, turned to Casebolt. However since Casebolt's only applicability is that it discloses the measuring of the length of time a user's hand is present, it is not seen how the combination of the teachings anticipate applicant's invention. This is not new and in fact the earlier cited and withdrawn patent to Kahlstadt referred to this feature. Nowhere does Casebolt disclose the measurement of the time a hand is present on an input device in an inactive position for a predetermined length of time after which an alarm signal is generated.

There is an obvious disconnect in the Examiner's reasoning since without more there is no anticipation. It is well known that the obviousness rejection is predicated on the fact that two teachings can be obviously combined and must in fact result in the claimed invention. The Examiner has made a quantum leap which finds no support and to say what is missing is obvious is unfathomable.

The claims clearly set forth a novel system and the Examiner's statement in the third paragraph on page 3 of the Official action can be interpreted to mean that the combination of Hesley and Casebolt teach all the limitations of the claimed invention and as such it is not necessary for the combination of the two references to meet the terms of the claims, if so interpreted, and is clearly in error and should be withdrawn.

As to the Examiner disagreement with our interpretation of Serpa and Gould these are ancillary matters that will be dealt with in our discussion of the Examiner rejections.

We now turn to the specific claim rejections.

The Examiner has rejected claims 16, 26, 28 and 32 over Hesley in view of Casebolt by parsing the claims and comparing portions of the claims to Hesley but in so doing recognizes that certain essential features of the claims are not present in Hesley. The essence of applicant's invention is timing the period a hand is present on the input signal device but inactive, and then after a predetermined period signaling to the user to remove his hand to prevent stress problems.

To make up for this deficiency he had utilized Casebolt which merely discloses the sensing of conditions where the hand is rested on the mouse for a period of time.

This combination of features clearly does not anticipate applicant's invention. The Examiner's explanation that one can take an isolated feature of Casebolt applying it to Hesley and then modify it to meet the terms of applicant's claim is clearly not obvious and requires a reconstruction of the disparate teachings, not taught by the references. The rationale appears to be that one being aware of Hesley and Casebolt would combine them to find anticipation "in order to take advantage of utilizing effective power management in user operated input devices" is simply unsupportable and should be withdrawn.

The rejections of claims 17, 18, 21, 22, 23, 27, 30 and 31 are all predicated on the premise that the combination of Hesley and Casebolt anticipate applicant's invention which it does not.

Each of these claims when combined with the novel combinations from which they depend define further novel combinations and are thus patentable.

The rejection of claims 19, 20 and 29 as being unpatentable over Hesley and Casebolt further in view of Serpa is in error and should be withdrawn.

Serpa does not use a motor-operated eccentric mass. On the contrary, he uses a "stabilized" or specifically non-eccentric balanced mass to prevent the whole mouse from vibrating (Col. 2, lines 53-63). Moreover, it is the goal of Serpa's invention to supply various types of information to the user by means of the stabilized information tactile signal. In order to receive and read this information, the user must continue to hold the mouse during the tactile signal which is the antithesis of applicant's invention. Upon the onset of the tactile signal, the user is alerted to release the mouse and remove the hand from a stressful condition.

As to claims 24 and 25 rejected over Hesley and Casebolt, the inapplicability of these references to the claimed invention has been clearly noted. Gould does not make up the deficiencies noted with respect thereto.

It is acknowledged that Gould teaches a system that monitors activity rate and warns the user to take a rest when warranted to reduce RSI. The activity rate does not constitute a risk profile, but merely warns the user when a certain level of activity is exceeded at that very same moment.



The Examiner's reference to Gould col. 1, lines 14-17 and col. 2, lines 13-20 and 25-27 do not define a risk profile, but merely refer to a single multiple warning system.

In any event, the novel combination of claimed features of Claims 24 and 25 and the claims from which they depend is clearly patentable and not obvious over the unwarranted combination of Hesley, Casebolt and Gould.

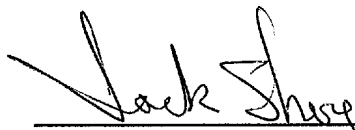
It is respectfully submitted that the existing claims are allowable over the prior art and such action is solicited.

We would welcome any comments by the Examiner to help expedite the prosecution of this application.

If the Examiner's review of this amendment results in a continuation of the Examiner's position and thus rendering the action final we would request that consideration be given to a conference call with the Examiner and his supervisor prior to the action being rendered so we can fully appreciate the position of the patent office and be better able to frame the issues on appeal.

It is believed that both parties would be well served by such a discussion.

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